

Docket No. 24649A (599-002)

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application

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Serial No.: 09/409,457

Filed: September 30, 1999

For: SUPERABSORBENT WATER-
RESISTANT COATINGS

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CLEAN VERSION OF CHANGES MADE**In the Specification**

The superabsorbent polymer precursor for use in the present invention may, for example, be selected from the group of chemical precursors to water-soluble polyacrylates which, upon cure, possess the required ability to absorb and desorb large quantities of water, as has been previously mentioned. The superabsorbent polymer precursor is preferably used in its anionic form as a salt of a corresponding alkali or alkali metal salt. The polymer salt is in the form of an aqueous solution that is either clear or slightly cloudy in appearance. A desirable solids content is in the range of from 30-35% weight. The solution also has a specific gravity of about 1.1 grams per milliliter and a viscosity of about 1000 mPas at about 20°C. The solution is typically slightly anionic, having a pH of from about 6 to about 8. One example of an acceptable superabsorbent polymer precursor is a water-soluble anionic

CE
CM
SUB
G7

E1
me

polyacrylate in aqueous solution. It is conceivable that coatings comprising the high swelling superabsorbent polymer of the present invention would absorb significantly higher quantities of water, demonstrating swell rates up to and including 600 times the dry weight.

In the Claims

E2

8. A composition for use as a water-resistant coating comprising:
a superabsorbent water-soluble polymer precursor; and
a binder selected from a group consisting of polyester, urethane, epoxy, latex and mixtures thereof and is cured to form a superabsorbent polymer.
